

Date: Thu, 17 Mar 94 04:30:09 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V94 #299  
To: Info-Hams

Info-Hams Digest                      Thu, 17 Mar 94                      Volume 94 : Issue    299

Today's Topics:

10 GHz EME question (2 msgs)  
1x1 Callsigns?  
ARLB026 Phone interference survey  
FT-530 Receive Proble  
FT-990 vs TS-850  
London info

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 16 Mar 1994 21:58:19 GMT  
From: swrinde!cs.utexas.edu!howland.reston.ans.net!wupost!gumby!  
newsxfer.itd.umich.edu!zip.eecs.umich.edu!panix!ddsw1!news.kei.com!  
newsstand.cit.cornell.edu!newsstand.cit.cornell.@ihnp4.ucsd.edu  
Subject: 10 GHz EME question  
To: info-hams@ucsd.edu

In article <1994Mar16.171007.15772@ke4zv.atl.ga.us> Gary Coffman,  
gary@ke4zv.atl.ga.us writes:

>

>I don't think so. The libration fading will be much reduced by  
>illuminating a smaller portion of the Moon. And gain is gain,  
>the extra gain will be usable for transmit. For receive it's  
>a somewhat different matter. Stations using small dishes will  
>be illuminating the entire lunar hemisphere. Your dish will  
>only receive part of that energy since the rest will fall outside  
>your beamwidth. But the extra dish gain should compensate for

>that, and your receive strength should be similar to that of  
>a dish that just illuminates the entire Moon. And, you'll receive  
>less thermal noise from the rest of the Moon, and less libration  
>fading. So while the big dish won't be that much better for receive,  
>it won't be worse, and on transmit it will be a big help to other  
>stations because it's reflected signal will behave more like a  
>strong point source.

>

>Gary

>--

|                              |  |              |  |
|------------------------------|--|--------------|--|
| >Gary Coffman KE4ZV          |  | You make it, |  |
| gatech!wa4mei!ke4zv!gary     |  |              |  |
| >Destructive Testing Systems |  | we break it. |  |
| uunet!rsiatl!ke4zv!gary      |  |              |  |
| >534 Shannon Way             |  | Guaranteed!  |  |
| emory!kd4nc!ke4zv!gary       |  |              |  |
| >Lawrenceville, GA 30244     |  |              |  |

Our local club had a presentation by one of the people at the Big Dish in Arecibo and his comments on EME work was that libration fading was much better with the smaller portion of the moon being illuminated. (He quoted some ridiculously small spot on the moon, I think I've misremembered it in the thousands of meters wide (can't be that small, can it?) - but then it is a spherical dish with 89 db of gain or so on 432 mhz...) Apparently they use about 10 watts for EME on 432. (and have a big transmitter in the Megawatt range, before antenna gain, for radar mapping stuff. ) Very interesting talk, wish I had written some of it down.

Anyway, it seems his comments dovetail with Gary's.

73 de Kevin, WB2EMS

"Question authority and the authorities will question you."

-----

Date: 16 Mar 1994 16:57:21 -0600

From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!cs.utexas.edu!

not-for-mail@network.ucsd.edu

Subject: 10 GHz EME question

To: info-hams@ucsd.edu

Michael R. Owen sez:

>Another argument says "no, the high gain of the dish will under-  
>illuminate the Moon so there is no \*real\* monster gain."

Can you explain the "real monster gain"? It seems to me that, since the moon's surface is approximately spherical, most of the RF that hits off-axis will be dispersed into space and not reflected back to the earth.

My seat-of-the-pants tells me to concentrate all RF at the center the moon.  
[That is, if the dish has the precision to maintain the center of the moon.]

73

Kris AA5U0  
mrz@aud.alcatel.com

-----  
Date: 16 Mar 1994 22:19:38 GMT  
From: ihnp4.ucsd.edu!swrinde!elroy.jpl.nasa.gov!netline-fddi.jpl.nasa.gov!sec396-  
news.jpl.nasa.gov!news@network.ucsd.edu  
Subject: 1x1 Callsigns?  
To: info-hams@ucsd.edu

Though I could wrong, there have been at least two 1x1 calls issued in the U.S.A. (N4V and N6V). They were commemorative calls issued to the Jet Propulsion Laboratory Amateur Radio Club and the Langley Research Center Amateur Radio Club in commemoration of the Viking landings on Mars. As far as I am aware, they are the only 1x1 calls issued in the U.S.A.

Randy Hammock KC6HUR  
hammock@kelvin.jpl.nasa.gov

-----  
Date: Wed, 16 Mar 1994 17:34:12 GMT  
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!  
cs.utexas.edu!convex!news.utdallas.edu!corpgate!bnrgate!bnr.co.uk!pipex!sunic!  
psinntp!psinntp!arrl.org!ehare@ihnp4.ucsd.edu  
Subject: ARLB026 Phone interference survey  
To: info-hams@ucsd.edu

ARRL (w1aw-list-approval@WORLD.STD.COM) wrote:

: The FCC has released the results of a telephone interference survey  
: just completed.

: If you would like a copy of the survey, which includes a list of  
: telephone models checked, send an SASE with two units of first class  
: postage to the Technical Information Service at ARRL HQ.

We are keyboarding an electronic copy as we speak. For now, send

email to ehare@arrl.org and ask for a copy; I will forward it along as soon as it is typed. It will also be put on our server and at our ftp site.

73, Ed

--

Ed Hare, KA1CV, ARRL Laboratory, 225 Main, Newington, CT 06111  
203-666-1541 ehare@arrl.org

My electronic posts and email do not necessarily represent the policy of the ARRL, but I can probably get in trouble for them anyway!

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Date: 16 Mar 94 19:08:27 GMT  
From: ncrgw2.ncr.com!ncrhub2!tdbunews!nsc32!wps@uunet.uu.net  
Subject: FT-530 Receive Proble  
To: info-hams@ucsd.edu

In article t4a@eis.calstate.edu, sadams@eis.calstate.edu (Steven Adams) writes:

--> .  
--> . [lines deleted]  
--> .  
-->  
--> Mine just came back last week. Fixed the code squelch problem and  
--> something about a new VFO knob??  
--> But it still exhibits the problem you described above.  
-->  
--> Steven Adams  
--> sadams@ctp.org  
--> KD6KGJ  
-->  
-->--

Yaesu had problems with the VFO knob. It kept falling off. When mine did that, I drove to Cerritos, since I work about 30 minutes from Yaesu and gave them my FT-530 to fix the problem. The tech did not like the way the squelch was acting on the UHF side, so he noted to repair that also. When they were done, two days since it was under warranty, I had a new VFO knob, fixed squelch, and a world amateur map. The knob is a known problem.

73's

Bill

-----

|                                   |                         |
|-----------------------------------|-------------------------|
| Bill Starkgraf                    | wps@ElSegundoCA.ncr.com |
| AT&T Global Information Solutions | (310) 524-5754          |
| El Segundo, CA                    | (800) 222-8372 x5754    |

Call: KD6UQB

Simi Settlers ARC  
Simi Valley, CA

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-----  
Date: 16 Mar 1994 20:17:23 GMT  
From: ihnp4.ucsd.edu!swrinde!elroy.jpl.nasa.gov!lll-winken.llnl.gov!korie!newsworthy.West.Sun.COM!ll-a!flloyd@network.ucsd.edu  
Subject: FT-990 vs TS-850  
To: info-hams@ucsd.edu

In article <2m4qak\$at9@news.iastate.edu> kenman@iastate.edu (Kenneth D Anderson) writes:

>  
>I've narrowed my choice of a new rig to either the Yaesu FT-990 or the  
>Kenwood TS-850. My interests right now are both ragchewing and DXing using  
>both CW and SSB.  
>  
>I've read the reviews, etc., and would like any input you have about the  
>performance of these rigs. If you have had a chance to use both of these  
>rigs, a comparison would be great!  
>

As many on this newsgroup know, I'm a big TS-850 fan and have owned more than one - my first being one of the first to arrive into the local store.

Last weekend, at Phoenix's largest annual swap meet, I saw about three or four TS-850's for sale, all for around \$1250.00 each.

But, I didn't see any FT-990's for sale... Hmmmmm.

I still like my 850, but lot'sa folks really like the 990.

-fred

[ Fred Lloyd, AA7BQ  
[ Sun Microsystems,  
[ Phoenix, AZ

Fred.Lloyd@west.sun.com ]  
Systems Engineer ]  
(602) 224-3517 ]

-----  
Date: Wed, 16 Mar 94 16:30:32 EST  
From: ihnp4.ucsd.edu!agate!blanket.mitre.org!linus.mitre.org!mwvm.mitre.org!

M14494@network.ucsd.edu  
Subject: London info  
To: info-hams@ucsd.edu

Many thanks to those responded to my request for info  
about 2 meters in London.

Mike, N4PDY

-----  
Date: 16 Mar 1994 21:51:13 GMT  
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!howland.reston.ans.net!  
vixen.cso.uiuc.edu!newsrelay.iastate.edu!news.iastate.edu!  
wjturner@network.ucsd.edu  
To: info-hams@ucsd.edu

References <763839599snz@g8sjp.demon.co.uk>, <2m7pt4\$dc9@news.iastate.edu>,  
<763851432snz@g8sjp.demon.co.uk>  
Subject : Re: 1x1 Callsigns?

In article <763851432snz@g8sjp.demon.co.uk> ip@g8sjp.demon.co.uk writes:  
>Actually, I \*have\* checked the international agreements. Sadly, I can find no  
>distinction between 'amateur service' and any other callsigns. It is, of  
>course, possible that I'm looking in the wrong place.

I know I read somewhere (sorry, don't know exactly where :-( ) that amateur  
calls are to follow the pattern I gave earlier (prefix--number--suffix). As I  
understand, this is for ham calls only, although the country designations used  
in the prefixes are used for all radio stations--amateur, commercial,  
government, military, etc.

>As I've said, I have been unable to find anything that differentiates amateur  
>callsigns allocations (at an international level) from other classes.  
>

>If you accept the premise that \*all\* callsigns are issued according to  
>international agreement, then either they will have to contain (somewhere) a  
>numeric character, or they will not. Fine. A strange coincidence: callsigns  
>assigned to aircraft (and shipping, for that matter ...) rarely - although  
>the FAA seem to be the very exception that proves the rule - contain numeric  
>characters.

As I said before, I only heard about this system for amateur calls. There may  
possibly be some system for other calls, also, but I have not read of it  
anywhere that I know of...

>British aircraft registrations and callsigns look like 'GBOAC'. I expect more  
>than a few D.C. area residents have seen that ....

>

>Oh - and where's the necessity to have a \*number\* to separate a prefix from  
>a suffix??? When you operate in another country, don't you (generally) take  
>the prefix (ITU assigned) and separate it from the suffix (your entire call)  
>by a '/' ?

I'm sorry to sound as if there must be a number between them; I meant there must be \*something\*. A prefix and suffix must have something to be the prefix and suffix of, and in this system it is always a number. This makes it easy to tell the prefix and suffix, even in the prefix has a number in it. The separator (or the mandatory number as I called it earlier--however misleading it was) is always the \*last\* number. (Thus our recurring A6#XX has # as the separaotr.)

In the case of the a call like NORDV/W6, I don't think the W6 is a prefix anymore, but some sort of designator. Pre meaning "first" or "before" does not make sense with a prefix at the end. Of course, this is just semantics when something move around and thus what it is called changes, and I'm sure others haven't learned the call things the same as I have.

>An interesting debate, and many times more enlightening thansome of the other  
>threads elsewhere in this newsgroup :-)

I agree. Now if we could actually get more people involved without a flame war...

73, Will NORDV/AE

--

|                           |   |
|---------------------------|---|
| Will Turner, NORDV        | -----                                       |
| wjturner@iastate.edu      | "Are you going to have any professionalism, |
| twp77@isuvax.iastate.edu  | or am I going to have to beat it into you?" |
| TURNERW@vaxld.ameslab.gov | -----                                       |

-----

Date: Wed, 16 Mar 1994 14:13:06  
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!howland.reston.ans.net!  
usenet.ins.cwru.edu!eff!news.kei.com!ssd.intel.com!chnews!ornews.intel.com!  
ccm.hf.intel.com!brett\_miller@network.ucsd.edu  
To: info-hams@ucsd.edu

References <1994Mar15.145856.8336@ke4zv.atl.ga.us>,  
<2m4rsv\$mmba@bigfoot.wustl.edu>, <1994Mar16.155633.14996@ke4zv.atl.ga.us>  
Subject : Re: Grounding and lightning protection

In article <1994Mar16.155633.14996@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:

(snip)

> That's the principle on which lightning rods are founded. They generate  
> streamers so that they are the preferred target of lightning bolts. Since  
> they are installed with low impedance paths to ground, they are able to  
> \*divert\* strike currents from harming other nearby structures. This is  
> called the "cone of protection". It's diameter is equal to about 1/3  
> the HAAT of the lightning rod in most installations. (High towers have  
> other problems, and a "rolling sphere" method of estimating the protective  
> zone must be used.)

(snip)

This is what I am having a hard time understanding. I am told that if  
I put things on my roof like antennas and solar panels, that they should be  
grounded with heavy guage wire etc. Sounds to me like I'm just turning all my  
roof ornaments into lightning rods! Wouldn't it be better to leave them  
ungrounded and install a lightening rod on the roof?

Brett Miller N70LQ  
Intel Corp.  
American Fork, UT

brett\_miller@ccm.hf.intel.com

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Date: 16 Mar 94 16:21:43 PDT  
From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!nic-nac.CSU.net!clstcs!  
armyrman@network.ucsd.edu  
To: info-hams@ucsd.edu

References <2m4rsv\$mmba@bigfoot.wustl.edu>,  
<1994Mar16.155633.14996@ke4zv.atl.ga.us>,  
<brett\_miller.15.000E3859@ccm.hf.intel.com>  
Subject : Re: Grounding and lightning protection

In article <brett\_miller.15.000E3859@ccm.hf.intel.com>,  
brett\_miller@ccm.hf.intel.com (Brett Miller - N70LQ) writes:  
> This is what I am having a hard time understanding. I am told that if  
> I put things on my roof like antennas and solar panels, that they should be  
> grounded with heavy guage wire etc. Sounds to me like I'm just turning all my  
> roof ornaments into lightning rods! Wouldn't it be better to leave them  
> ungrounded and install a lightening rod on the roof?  
>

I too have antennas up on the roof and a couple long wire (dipoles) hanging  
around off the house.

What should be done when lightning comes? I understand clearly that they  
should NOT be in the radio but where should the lead-in's go?



I have a heavy ground run to the radio room for grounding the equipment. Should the antennas be connected to this, grounding the center conductor and shield? Should they be grounded and a real lightning rod be installed? Or just disconnected from the radio's?

---

Alex R. Myrman - KC6TMB - armyrman@vms4.sci.csupomona.edu  
College of Science Computational Systems - (909) 869-4226  
California State Polytechnic University, Pomona, CA. USA

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Date: Wed, 16 Mar 1994 20:57:12 +0000  
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!  
howland.reston.ans.net!EU.net!uknet!pipex!demon!g8sjp.demon.co.uk!  
ip@network.ucsd.edu  
To: info-hams@ucsd.edu

References <2m78pf\$5kh@news.iastate.edu>, <763839599snz@g8sjp.demon.co.uk>,  
<2m7pt4\$dc9@news.iastate.edu>emon  
Reply-To : ip@g8sjp.demon.co.uk  
Subject : Re: 1x1 Callsigns?

In article <2m7pt4\$dc9@news.iastate.edu>  
wjtturner@iastate.edu "William J Turner" writes:

> Check the international agreements. By them, ham calls are to be a one or two  
> character prefix (can include numbers), a number (hence, the mandatory  
> number), and a one to three letter suffix (no numbers allowed).

Actually, I \*have\* checked the international agreements. Sadly, I can find no distinction between 'amateur service' and any other callsigns. It is, of course, possible that I'm looking in the wrong place.

> Therefore, 'NOTWITHSTANDING' would \*not\* fit as there is not number, thus no  
> prefix or suffix. (You have to have something to attach them to.) It may be  
> legal, but it wouldn't be an acceptable ham call according to international  
> agreements.

As I've said, I have been unable to find anything that differentiates amateur callsigns allocations (at an international level) from other classes.

If you accept the premise that \*all\* callsigns are issued according to international agreement, then either they will have to contain (somewhere) a numeric character, or they will not. Fine. A strange coincidence: callsigns assigned to aircraft (and shipping, for that matter ...) rarely - although the FAA seem to be the very exception that proves the rule - contain numeric

characters.

British aircraft registrations and callsigns look like 'GBOAC'. I expect more than a few D.C. area residents have seen that ....

Oh - and where's the necessity to have a \*number\* to separate a prefix from a suffix??? When you operate in another country, don't you (generally) take the prefix (ITU assigned) and separate it from the suffix (your entire call) by a '/' ?

An interesting debate, and many times more enlightening than some of the other threads elsewhere in this newsgroup :-)

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Iain Philipps

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Date: Thu, 17 Mar 1994 00:30:06 GMT  
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!  
europa.eng.gtefsd.com!library.ucla.edu!csulb.edu!csus.edu!netcom.com!  
dkrauss@network.ucsd.edu  
To: info-hams@ucsd.edu

References <1994Mar14.163412.24670@jupiter.sun.csd.unb.ca>,  
<Anthony\_Pelliccio-140394143004@138.16.64.52>, <bote.763793771@access1>lb.edu  
Subject : Re: PC-based repeater controllers?

John Boteler (bote@access1.digex.net) wrote:  
: Anthony\_Pelliccio@brown.edu (Tony Pelliccio) writes:  
: >a4q4@jupiter.sun.csd.unb.ca (D.J.Trynor EE) wrote:  
: >> I have a PS/2 Model 30 sitting idle on my desk.....I have no hard drive for  
: >> it, so I'm looking for a possible application for it. I'd like to know  
: >> if anyone has any information on how I might change this unit into a  
: >> repeater controller.

: >The software end wouldn't be too complicated either, and with a hard drive  
: >it'd be one kick-butt controller. Hell.. think of the mods you could make!

: My club has been kicking this around for way too long now.

: We have looked at several PC-based repeater controllers,  
: but they are either way the hell too expensive for  
: what they do or they do only what they do with no  
: room for innovation or expansion.

: Both issues gave us pause. I wouldn't mind developing

: a neat driver that would allow you to write your  
: own repeater controller in a script language, but  
: that sounds too much like work if there was no \$\$\$ market  
: for it. Similar sentiments have been expressed to me  
: by an associate who wrote a microcontroller repeater  
: controller.

: So, is a whiz-bang system meeting my wish list  
: above now available in the ham market?

I built a board for the DTMF and COR input/outputs, wrote some  
software in Visual Basic for it, and it ran great. Needed the PC for  
something else though, so I replaced it with a single board computer.  
It can work, though, without costing a fortune.

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dkrauss@netcom.com

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End of Info-Hams Digest V94 #299

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